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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/612,156

07/02/2003

Narayan Parappil Menon

1-2-0335.1US

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24374 7590 07/02/2008

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EXAMINER

DUONG, CHRISTINE T

ART UNIT

PAPER NUMBER

2616

MAIL DATE

DELIVERY MODE

07/02/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/612,156

Applicant(s)

MENON ET AL.

Examiner

CHRISTINE DUONG

Art Unit

2616

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period **will** apply and **will** expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply **will**, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 25 March 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-11, 16 and 17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11, 16 and 17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date: \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Response to Amendment*

This is in response to the Applicant's arguments and amendments filed on 25 March 2008 in which claims 1-11, 16-17 are currently pending.

### ***Claim Rejections - 35 USC § 102***

1. Claims 16-17 are rejected under 35 U.S.C. 102(e) as being anticipated by Ramos et al.

Regarding **Claim 16**, Ramos et al. discloses a method for enabling cell selection of preferred service areas (PSAs) (plurality of areas, Claim 36) by a wireless transmit/receive unit (WTRU) (user, Claim 36 and mobile station 2, Fig. 1) in a wireless local area network (WLAN) (network, Claim 36 and WLAN 14, Fig. 1); comprising:

communicating with a first network ("user being assigned to at least one of said areas", Claim 36);

receiving higher-level system information from the network ("receiving information identifying said plurality of candidate areas", Claim 36);

detecting the WTRU's location ("information is collected as a function of user position", Claim 37);

selecting a PSA based upon which PSAs the WTRU is permitted to access ("estimating for each candidate area a parameter, said parameter assuming that said user is assigned to said candidate area; and prioritising said plurality of candidate areas which takes into account the estimated value of said parameter; wherein said area with which

said user is associated is divided into a plurality of smaller areas and information relating to each of said smaller areas is used in said estimating and/or prioritising step”, Claim 36);

and attaching to the PSA and releasing WLAN (“the network has some other reasons for moving the mobile station to another cell, handover/cell reselection is required”, see Column 4, Lines 27-29).

Regarding **Claim 17**, Ramos et al. discloses everything claimed as applied above (see *Claim 16*). In addition, Ramos et al. discloses the PSA locations are stored within the WTRU (“having associated therewith a plurality of candidate areas to which the user may be assigned”, Claim 36).

### ***Claim Rejections - 35 USC § 103***

2. Claims 1-2, 5-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ramos et al. further in view of Sundar et al.

Regarding claim **1**, Ramos et al. discloses a method for use in a communication system including at least one wireless transmit/receive unit (WTRU) (figs. 1-2), the method comprising:

establishing a bidirectional internet protocol (IP) link at said WTRU (“A mobile station 2 or the like user equipment is able to use more than one radio access technology” column 3, lines 7-8 and “radio resource controller is intended to cover any entity in any access system which provides a control function within its radio access system. For example, this may be a base station controller (BSC) in a GSM/EDGE system, a radio network controller (RNC) in a CDMA system, cell resource server (CRS) in a IP RAN system or the like” column 8, lines 26-31);

transmitting a request for system information from said WTRU to said primary station over said bidirectional IP link (“a handoff trigger is detected” column 7 line 35 and “The CRRM will receive periodically or on demand information about the status of cell resources 30” column 5, lines 12-13); and

receiving said requested system information over said bidirectional IP link (“the mobile station receives a handover command from the radio network controller” and “the CRRM needs to know the configuration information of the different cells and/or configuration information of different RAN elements” column 6, lines 29-31).

However, Ramos et al. fails to specifically disclose transmitting a request for system information from said WTRU to said primary station over said bidirectional IP link and receiving said requested system information over said bidirectional IP link and a radio link and an IP link connected to a same network.

Nevertheless, Sundar et al. teaches “When a client wishes to access a BSS (either after a power up or when first entering the BSS) it needs to get synchronization information from the AP controlling the BSS. The client sends a probe to the AP and awaits a response to the probe” Sundar et al. [0017]) and a Wireless Wide Area Network (WWAN) and a Wireless Local Area Network (WLAN) and fig. 3.

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to transmit a request for system information from said WTRU to said primary station over said bidirectional IP link and receive said requested system information over said bidirectional IP link and have a radio link and an IP link

connected to a same network because “at the completion of the association process, the client is ready for receiving or transmitting data” (Sundar et al. [0017]).

Regarding claim **2**, Ramos et al. and Sundar et al. disclose everything claimed as applied above (see claim 1). In addition, Ramos et al. discloses the request comprises a specific configuration, and said requested system information is received in said specific configuration (“the CRRM needs to know the configuration information of the different cells and/or configuration information of different RAN elements” column 6, lines 29-31).

Regarding claim **5**, Ramos et al. and Sundar et al. disclose everything claimed as applied above (see claim 2). In addition, Ramos et al. discloses the specific configuration includes service ability (“This configuration information should preferably include the cell capabilities. For example this would include information as to whether if a particular cell is supporting GPRS (general packet radio service) and/or EDGE (8-PSK modulation) in GSM” column 6, lines 31-36).

Regarding claim **6**, Ramos et al. and Sundar et al. disclose everything claimed as applied above (see claim 2). In addition, Ramos et al. discloses the specific configuration includes the congestion status of the system (“Current traffic load of the cell” column 5 line 15).

Regarding claim **7**, Ramos et al. and Sundar et al. disclose everything claimed as applied above (see claim 2). In addition, Ramos et al. discloses the specific configuration includes the data rates supported by the system (“QoS requirements, such as a guaranteed throughput requirement should be taken into account when selecting the

optimum cell. Throughput can be measured as number of bits (or data bits) transferred in one direction across a section per unit time (e.g. bps)" column 6 lines 57-61).

Regarding claim **8**, Ramos et al. and Sundar et al. disclose everything claimed as applied above (see claim 2). In addition, Ramos et al. discloses the request includes information regarding a second primary station; and said WTRU switches to said second primary station in response thereto ("The received signal strength or link quality information (e.g. RxLev (received signal level) in GSM, received signal code power (RSCP) or energy per chip to interference ratio ( $E_c/I$ ) in WCDMA) from the serving cell and the directed retry, direct access, handover or cell-reselection candidates prior to such event" column 6 lines 47-52).

Regarding claim **9**, Ramos et al. and Sundar et al. disclose everything claimed as applied above (see claim 8). However, Ramos et al. fails to specifically disclose the primary station is a UMTS system and said second primary station is a WLAN, as claimed. Ramos et al. discloses "that new cell may be in a different radio access system or the same system" (column 7 lines 61-62).

Nevertheless, Sundar et al. teaches that "FIG. 15 shows the case of the mobile station 310 roaming from a WWAN 100 to WLAN 200 environment. The mobile station 310 senses the RF strength in the proximity of the WLAN and decides to start using the WLAN environment, thus initiating a registration request" ([0080]).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to make Ramos et al.'s primary station a UMTS system and second primary station a WLAN because "this facilitates the internetworking of WLANs and

WWANs and facilitates the use of multimode mobile stations that can selectively communicate with either a WLAN or a WWAN” ([0020]).

Regarding claim **10**, Ramos et al. and Sundar et al. disclose everything claimed as applied above (see claim 9). However, Ramos et al. fails to specifically disclose the WTRU measures the strength of signals transmitted from the primary station and from the second primary station, and switches to said second station when the strength of the signal from the second station exceeds a predetermined signal strength level, as claimed. Ramos et al. discloses “The received signal strength or link quality information (e.g. RxLev (received signal level) in GSM, received signal code power (RSCP) or energy per chip to interference ratio (Ec/I) in WCDMA) from the serving cell and the directed retry, direct access, handover or cell-reselection candidates prior to such event” (column 6 lines 47-52).

Nevertheless, Sundar et al. teaches that “when the mobile station 310 roams in the WLAN 200, it continues to sense the RF energy strength of the WWAN 100 and WLAN 200. If it detects that the WLAN RF strength decreases below some threshold value and the WWAN strength is above a threshold value, it initiates a registration process with the macro (WWAN) network 100” ([0069]).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to measure Ramos et al.’s signal strength from both stations and switch to the second station when the signal strength exceeds a predetermined level because “this facilitates the internetworking of WLANs and WWANs and facilitates the use



of multimode mobile stations that can selectively communicate with either a WLAN or a WWAN" ([0020]).

Regarding claim **11**, Ramos et al. and Sundar et al. disclose everything claimed as applied above (see claim 8). However, Ramos et al. fails specifically disclose the primary station is a WLAN and the second primary station is a UMTS system, as claimed. Ramos et al. discloses "that new cell may be in a different radio access system or the same system" (column 7 lines 61-62).

Nevertheless, Sundar et al. teaches that "FIG. 8 shows the movement of a mobile station 310 from a WLAN environment 200 to a WWAN environment 100. The mobile station 310 registers in the WWAN environment 100 as it roams from the WLAN 200 into the WWAN. Likewise the appropriate handoff must be made as well. The mobile station 310, using the network sensing method described above, infers that it needs to register with the WWAN environment" ([0074]).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to make Ramos et al.'s primary station a WLAN system and second primary station a UMTS because "this facilitates the internetworking of WLANs and WWANs and facilitates the use of multimode mobile stations that can selectively communicate with either a WLAN or a WWAN" ([0020]).

3. Claims 3-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ramos et al. and Sundar et al. further in view of Rappaport et al. (US Patent No. 7,055,107 B1).

Regarding claim **3**, Ramos et al. and Sundar et al. disclose everything claimed as applied above (see claim 2). However, Ramos et al. and Sundar et al. fail to specifically disclose the specific configuration includes billing information.

Nevertheless, Rappaport et al. teaches “one or more parameters of the desirable configuration is billing information” (Rappaport et al. column 25 lines 49-57).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include billing information in the specific configuration because of engineering design choice and versatility of the information option.

Regarding claim **4**, Ramos et al. and Sundar et al. disclose everything claimed as applied above (see claim 2). However, Ramos et al. and Sundar et al. fail to specifically disclose the specific configuration includes security information.

Nevertheless, Rappaport et al. teaches “one or more parameters of the desirable configuration is security” (Rappaport et al. column 25 line 49-55).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include security information in the specific configuration because engineering design choice and versatility of the information option.

### ***Response to Arguments***

Previous 35 USC 112 rejection to claim 1 is withdrawn in view of Applicant's amendment.

4. Applicant's arguments have been fully considered but they are not persuasive.

In response to Applicant's argument regarding claim 16 that Ramos does not disclose the element of selecting a PSA, the examiner respectfully disagrees. Ramos

discloses "The cell prioritization algorithm which can be used in CRRM to choose or assign the optimum target cell for connection in call setup, idle mode and in handovers/cell-reselections" (column 4 lines 21-24). This shows that a service area is chosen after prioritization. Therefore, Ramos discloses selecting a PSA.

In response to Applicant's argument regarding claim 16 that Ramos does not disclose which PSAs the WTRU is permitted to access, the examiner respectfully disagrees. Ramos discloses "the candidate target cell list is then rearranged according to each cell's grade of suitability to hold on to the connection" (column 4 lines 52-54) and "input when selecting the optimum cell as this defines whether the mobile station is in the coverage area of particular cell candidate (column 6 lines 52-55). This shows that some requirements are needed in order to select which area to choose from. Therefore, Ramos discloses which PSAs the WTRU is permitted to access.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). As shown in the previous and current office action, the examiner relied on the Sundar reference to read on the claimed limitation "transmitting a request for system information from a WTRU over a bidirectional IP link".

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention

where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the motivation for the rejection is found in the Sundar reference where "at the completion of the association process, the client is ready for receiving or transmitting data" ([0017]).

5. Applicant's arguments with respect to claim 1 regarding a radio link and an IP link which connect to a same network have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHRISTINE DUONG whose telephone number is (571)270-1664. The examiner can normally be reached on Monday - Friday: 830 AM-6 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on (571) 272-3174. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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06/26/2008